

REMARKS

Claims 17 – 30 are presently pending. In the above-identified Office Action, the Examiner rejected Claims 17 and 21 – 30 under 35 U.S.C. § 102(e) as being anticipated by Hadden *et al.* (U.S. Patent No. 6,424,817), hereinafter ‘Hadden’. Claims 18 – 20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hadden in view of Marko *et al.* (U. S. Patent No. 6,154,452), hereinafter ‘Marko’.

By this Amendment, the limitation of Claim 21 has been added to Claims 17, 28 and 29. Claims 18 – 20 and 30 have been canceled and new Claims 31 – 36 have been added for consideration.

For the reasons set forth more fully below, the present Application is submitted as properly presenting Claims patentable over the prior art. Reconsideration, allowance and passage to issue are respectfully requested.

As previously noted, the present invention addresses the need in the art for a system and method for distributing satellite digital audio radio service to a plurality of receivers that are not independently mobile relative to each other. The inventive system includes a satellite antenna and a radio frequency (RF) satellite receiver. In the best mode, the RF satellite receiver is a terrestrial repeater. The repeater decodes a stream of data received from the satellite and recodes the stream using an intermediate frequency satellite radio terrestrial broadcast format. In the best mode, the signal is an intermediate frequency signal in the XM radio, multi-carrier modulation (MCM) format.

The recoded signal is rebroadcast by the repeater via a distribution network and received by a plurality of intermediate frequency (IF) receivers. The distribution system may be wireless, cable, or fiber optic. In the illustrative embodiment, the IF receivers are modified conventional satellite digital audio radio service receivers. A user interface is provided for each IF receiver to allow for channel selection and audio processing.

The invention is set forth in Claims of varying scope of which Claim 29 is illustrative. Claim 29 recites:

29. A satellite digital audio radio multipoint distribution system comprising:
a satellite antenna for receiving a satellite digital audio radio signal;
a terrestrial repeater connected to said antenna for decoding said satellite signal and recoding said signal into an **XM radio terrestrial intermediate frequency (IF) multi-carrier modulated satellite radio terrestrial broadcast format signal**; and
a system for distributing said recoded IF signal. (Emphasis added.)

None of the references, including those cited but not applied, taken alone or in combination, teaches, discloses or suggests the invention as presently claimed. That is, none of the references teaches, discloses or suggests a satellite digital audio radio multipoint distribution system having a terrestrial repeater adapted to receive and recode satellite signals into **XM radio terrestrial intermediate frequency (IF) multi-carrier modulated satellite radio terrestrial broadcast format signals** and a system for distributing the recoded IF signals.

The Claims have been amended to include the limitations of Claim 20. As mentioned above, Claim 20 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Hadden and Marko. Hadden purports to teach dual-polarity, low-noise block downconverter systems and methods. While the Examiner acknowledges that Hadden does not teach that the recoded signal is an XM radio terrestrial frequency multi-carrier modulated signal, the Examiner suggests that Marko provides this teaching and that it would have been obvious to one having ordinary skill in the art to modify the system of Hadden as taught by Marko. The Examiner asserts that the motivation to do so would be to improve broadcasting service for high quality signal reception in a satellite broadcast system. However, Applicants respectfully submit that these assertions are erroneous.

First, there is no basis for combining the teachings of Hadden and Marko. Marko teaches a system in which terrestrial signals are broadcast by satellite, received by a terrestrial antenna and then distributed (rebroadcast) at radio frequency (RF). See the antenna 18 in Fig. 1. As per the XM radio Satellite Digital Audio Radio Service

(SDARS) scheme, the terrestrial component of the transmitted composite signal is designed to provide improved **coverage** to **mobile** SDARS receivers. The terrestrial component is rebroadcast to reach mobile receivers in tunnels and urban canyons. The terrestrial component is not transmitted to improve signal quality.

Hence, the basis suggested by the Examiner for combining the teachings of Hadden and Marko, to wit, that to do so would improve signal quality, is not supported by the combined teachings of the references.

Moreover, there is basis for incorporating an XM radio terrestrial frequency multi-carrier modulated signal scheme into the system of Hadden. Hadden's system is designed to transmit direct broadcast television signals to receivers (presumably television receivers) at subscriber locations. See col. 1, lines 18 – 30 and col. 3, lines 37 – 48 for example. The XM radio terrestrial frequency multi-carrier modulated signal scheme is designed for mobile radio receivers. Hence, the question is, why would one of ordinary skill in the art use a signal scheme that is designed to provide optimized coverage to **mobile radio** receivers in a system designed for **stationary television** receivers?

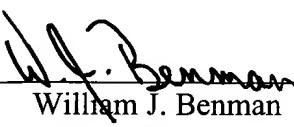
Applicants respectfully submit that one of ordinary skill in the art would not be inclined to use the XM radio signal in the system of Hadden as no mobile SDARS radio receivers are being used by Hadden.

As mentioned above, Applicant has added new Claims 31 – 36 for consideration. These claims include limitations addressed to the location of the system components at a single structure and that the structure is mobile. For the reasons set forth above, these claims should be allowable as well.

Accordingly, reconsideration, allowance and passage to issue are respectfully requested.

Respectfully submitted,
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